DNV·GL

Certificate No:
TAS00000JY

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Cargo Securing Devices

with type designation(s)
D-Ring K-A1-1/20

Issued to
Kunshan Lucky Sea Industrial Co. Ltd
Kunshan, China

is found to comply with
DNV GL rules for classification – Ships

Application :

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.

MSL, tension (kN) 100
MSL, shear (kN)
MSL, compr. (kN)

This Certificate is valid until **2021-07-13**.

Issued at **Hamburg** on **2016-07-14**

for **DNV GL**

DNV GL local station: **Shanghai CMC**

Approval Engineer: **Mark-Oliver Wobig**

on behalf of Andree Orth
Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid.
The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

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Product description

D-Ring A1-1/20

Application/Limitation

Load	Tension [kN]
Test Load	125
Breaking Load	200

Tests to be carried out:

- Production testing: At least 2% of the items delivered are to be selected and subjected to the test load.
- Material tests are to be included energy testing at -20°C, with the impact energy requirements acc. to DNVGL-ST-0068. The material shall be according to the approved drawings. Material certificates shall be 3.1 acc. to DIN EN 10204.

Type Approval documentation

Drawing No.	Rev.	Title
K-A1-1/20		D-Ring and Clamp

Drawing approval No. DNVGL Ref.-No.: 05-108674 Date: 2005-09-07

Tests carried out

The prototype test was carried out in Kunshan, P.R. China, dated 2016-05-13 in accordance with the DNVGL-ST-0068.

Marking of product

Each item shall be marked by manufacturer for traceability.

Periodical Assessment

For retention of the Type Approval, a DNVGL surveyor shall perform a survey after 2 years, to verify that the Type Approval is complied with.